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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,156	10/05/2000	Stephen D. MacArthur	07072-115001	9150

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DALY, CROWLEY & MOFFORD, LLP
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EXAMINER

CHANKONG, DOHM

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,156

Applicant(s)

MACARTHUR ET AL.

Examiner

Dohm Chankong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6, 4/23/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Applicant's amendment file on 4/26/2004 in response to Examiner's Office Action has been reviewed. The following rejections now apply.
2. Claims 1 and 2 are presented for examination.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 and 2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 7 and 9 of U.S. Patent No. 6,061,274 in view of Noguchi, U.S Patent No. 4,977,556. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to have allowed the receiving directors to not only check if the message were addressed to the correct receiving director but to verify that the message were from a proper transmitting director in order to provide more message transmission reliability and error-

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checking. In addition, Noguchi discloses separating the message network from the data transfer section, such a separation being obvious to decrease data switching time and transmission delay times.

Claim Rejections - 35 USC § 103

1. Claims 1 and 2 are rejected under 35 U.S.C 103(a) as being unpatentable over Thibault et al (hereinafter Thibault), U.S Patent No. 6,061,274 in view of Noguchi.
2. Thibault was cited by Examiner in previous Office Action as prior art made of record but not cited and Applicant in IDS #6, filed 4.23.2004.
3. As to claim 1, Thibault teaches a method for transferring data between a host computer/server and a bank of disk drives through a system interface, such system interface comprising: a plurality of first directors coupled to the host computer/server; a plurality of second directors coupled to the bank of disk drives; a data transfer section couple to the plurality of first directors and second directors and a messaging network coupled to the plurality of first directors and the plurality of second directors, such first and second directors controlling data transfer between the host computer and the bank of disk drives in response to messages passing between the directors through the messaging network as such data passes through the data transfer section (Figures 1 and 2, column 2, lines 10-62, column 3, line 30 to column 4, line 52) such method comprising:

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preparing in a transmitting one of the directors, a message to be sent to a receiving one, or ones, of the directors (column 7, lines 26-52);

transmitting such message to said receiving one, or ones, of the directors through the messaging network (column 7, line 53 to column 8, line 10);

receiving in one of the receiving one or ones of the directors the transmitted message (column 8, lines 11-33).

Thibault does not teach transmitting such message to said receiving one, or ones, of the directors through the messaging network but not that such messages by-pass the data transfer section. He also does not teach:

determining in such receiving one, or ones, the receiving directors whether the received packet is from a proper, or an improper transmitting one of the directors;

rejecting the message if it is from an improper transmitting one of the directors and further processing such message if it is from a proper one of the transmitting directors

4. Noguchi teaches a transmitting messages through a messaging network with such messages by-passing a data transfer section (column 7, lines 31-34 and lines 41-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Noguchi's two independent bus design, one for the transfer of data the other for the transfer of messages, into Nakayama's data transfer system to cut down on switching time and transmission delay time through the bus.

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5. It would have been obvious to modify Nakayama et al such that the first level director and second level director would determine whether a received message is from a proper source, and to consequently reject the received message if the source is improper as such a modification is well known in the art, and therefore involves only routine skill in the art.

6. As to claim 2, Thibault teaches a method including having the receiving, one or ones, of the directors send an acknowledge receipt of the packet to said transmitting one of the transmitting such packet (claim 9).

7. Claims 1 and 2 are rejected under 35 U.S.C 103(a) as being unpatentable over Nakayama et al (hereinafter Nakayama), U.S Patent No. 5,920,893 in view of Noguchi.

8. Nakayama was cited by Examiner in previous Office Action, dated 12/18/03.

9. As to claim 1, Nakayama teaches a method for transferring data between a host computer/server and a bank of disk drives through a system interface, such system interface comprising: a plurality of first directors coupled to the host computer/server; a plurality of second directors coupled to the bank of disk drives; a data transfer section couple to the plurality of first directors and second directors and a messaging network coupled to the plurality of first directors and the plurality of second directors, such first and second directors controlling data transfer between the host computer and the bank of disk drives in

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response to messages passing between the directors through the messaging network as such data passes through the data transfer section, such method comprising:

preparing in a transmitting one of the directors, a message to be sent to a receiving one, or ones of the directors;

receiving in one of the receiving one or ones of the directors the transmitted message (Figure 3, column 2, lines 27-35, column 4, line 42 to column 5, line 13 and column 6, lines 45-50).

Nakayama does teach transmitting such message to said receiving one, or ones, of the directors through the messaging network but not that such messages by-pass the data transfer section. He also does not teach:

determining in such receiving one, or ones, the receiving directors whether the received packet is from a proper, or an improper transmitting one of the directors;

rejecting the message if it is from an improper transmitting one of the directors and further processing such message if it is from a proper one of the transmitting directors

10. Noguchi teaches a transmitting messages through a messaging network with such messages by-passing a data transfer section (column 7, lines 31-34 and lines 41-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Noguchi's two independent bus design, one for the transfer of data the other for the transfer of messages, into Nakayama's data transfer system to cut down on switching time and transmission delay time through the bus.

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11. It would have been obvious to modify Nakayama et al such that the first level director and second level director would determine whether a received message is from a proper source, and to consequently reject the received message if the source is improper as such a modification is well known in the art, and therefore involves only routine skill in the art.

12. As to claim 2, Nakayama does not explicitly teach a method including having the receiving, one or ones, of the directors send an acknowledge receipt of the packet to said transmitting one of the transmitting such packet.

13. It would have been obvious to modify Nakayama's messaging network so that it included acknowledgement functionality between the first and second level directors as such a modification is well known in the art, and therefore involves only routine skill in the art.

Response to Arguments

14. Applicant's arguments, see page 4, lines 4-11, filed 4.19.2004, with respect to the rejection(s) of claim(s) 1 and 2 under 35 U.S.C 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Thibault, in view of Noguchi. These teachings overcome Applicant's arguments in regards to previous teaching not being proper prior art to the Applicant's patent application. Thibault and Noguchi are both filed

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previous to the co-pending application, 09/540,828, filed 3.21.2000, with which Applicant's application has claimed benefit under the provisions of 35 U.S.C 120.

15. Applicant's arguments with respect to claims 1 and 2 in regards to Examiner's rejection under 35 U.S.C 103(a) have been considered but are moot in view of the new ground(s) of rejection.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (703)305-8864. The examiner can normally be reached on 8:00AM - 5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DC

 JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
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